## Interagency Ecological Program Quarterly Directors Meeting Notes Wednesday, July 7, 2010, 9 AM – 11 AM The Resources Building 1416 Ninth St. Sacramento, CA DFG Conference Room 1206

Present: Chuck Armor, John McCamman, Jerry Johns, Ren Lohoefener, Howard Brown, Dave Gore, Eric Reichard, Scott Clark, Cliff Dahm, Karen Schwinn, Anke Mueller-Solger, Terry Macaulay, Ted Sommer, Rich Breuer, Roger Fujii, Erwin Van Nieuwenhuyse, Tom Kimball, Mike Chotkowski, Bruce Oppenheim, Kelly Souza, Bob Clark, Kim Web, Paul Cadrett, Tom Howard, Lauren Hastings.

- 1. Introductions and consideration of agenda (Chuck Armor, DFG)
- 2. IEP Science Update (Anke Mueller-Solger, Delta Stewardship Council) -Anke shared some results from the recent IEP workshop:
  - The pilot first-flush migration experiment showed that delta smelt were mostly captured on the flood tide and hardly at all on the ebb. Planning is still underway for the next first flush migration experiment and will include trying to hone in on where delta smelt go during the ebb tide (near-bottom, shoals, or upstream).
  - The Collection, Handling, Transport and Release (CHTR) study reported that overall, adult delta smelt fare well in surviving the CHTR process, but juveniles less so. More than 63% of adult marked delta smelt were recovered when released in front of the trash racks and 27% of those survived the CHTR process. However, less than 7% of adult marked delta smelt were recovered when released at the radial gates. It appears as though (for adults) the salvage process is okay but the predation aspect through Clifton Court Forebay is not so great.
  - Adult largemouth bass stay close to shore and vegetation, have great site fidelity and eat a shore-based diet of fish and invertebrates. It doesn't appear that they venture much into the channels so they're probably not eating a lot of delta smelt.
  - The Contaminants Synthesis Report by Michael Johnson (UCD, Center for Watershed Sciences) was conducted to compile and review data to determine if available data are sufficient enough to characterize the role of contaminants in the POD. The report revealed that contaminants data is not adequate for determining the role of contaminants in the POD. The majority of the contaminants data is poorly documented, inaccessible, and the monitoring design was not so useful. This may not be helpful for learning from the past but we can overcome this for the future (lots of room for improvement). Some future contaminants work includes investigating pyrethroids in the north Delta and American River, novel biomarker work with genes in delta smelt, and coordination with the Delta Regional Monitoring Program (RMP).
  - Other new work includes lots of food web studies, Corbula physiology, remote sensing of *Microcystis*, ammonium and ammonia (sources, distribution, transport, etc.).
  - We will be continuing the POD synthesis analysis with the Bren School at UCSB through September 2010 to allow the three work groups to come together and look at the whole system under the regime shift concept.

- On the horizon: There will be a full-day POD session at the September Delta Science Conference.
- POD focuses on multiple drivers of change.
- 3. Delta Science Program update (Cliff Dahm, Delta Science Program)
  - Cliff reported that the Delta Science Program's (DSP) mission, goals and objectives will remain the same as CALFED's mission, goals and objectives. The focus of the DSP will be on funding, peer review, synthesis and integrating science and engineering in the Delta. Structurally, DSP is different from CALFED in that both the Independent Science Board (ISB) and the DSP report to the Delta Stewardship Council. One of the requirements of the ISB is to review major science programs that concern Delta management, at least once every four years. The IEP can expect to be one of the programs reviewed in the next four years. Cliff also distributed a list of the 10 members appointed to the ISB (bios can be found here:
    - http://www.deltacouncil.ca.gov/delta\_science\_program/isb/isb\_members.html).
  - The PSP is back on track. 48 proposals requesting \$30,000,000 were received. The DSP has \$8,000,000 to award in the fall, but the first steps include an administrative review, then a technical review by three outside experts per proposal. Lastly, a review panel consisting of approximately 12 people will group the proposals in order of ranking.
  - In light of the fact that today's meeting was focused on the future strategic direction of the IEP, Cliff shared that the Long Term Ecological Research (LTER) Network is the recipient of the 2010 Distinguished Scientist Award by the American Institute of Biological Sciences. Cliff feels that the reasons why LTER received this award is because they are leaders in data management, data analyses, and development of models.
- 4. Strategic Direction (Chuck Armor, DFG)
- -Chuck Armor kicked off the strategic direction discussion by reminding the group that regardless of which direction the IEP chooses to adapt, improvement is vitally needed in three overarching areas:
  - Data management and accessibility;
  - Analysis, synthesis, assessment and communication;
  - Modeling

At present, our resources (labs, boats, biologists) are fully committed. If we are to take on additional work we have two options; a) doing less of what we do now, or b) obtaining more resources. Any expansion or adaptation will require more coordination (i.e. more of the Coordinators' time will need to be devoted to the IEP).

- -John McCamman (DFG) asked if the DSP would conduct much in the way of synthesis/analyses. Since that is historically not the role DSP (previously CALFED) plays, it seems logical that IEP would need to fill that gap.
- -Jerry Johns (DWR) expects to see more special studies focused on effectiveness monitoring for BDCP. He suggested that the IEP Coordinators working with Paul Cylinder (SAIC) would be a good idea. Jerry also suggests that new monitoring to measure effectiveness could potentially be absorbed within the BDCP process.
- -Ren Lohoefener (USFWS) mentioned the need to focus on the applied aspect of models. He would like to see better coordination among all the models instead of people working independently. Ren feels that if he had to select one area in which to adapt, it would be an

expansion of the geographical scope of the IEP, with the caveat of knowing that the IEP would need to remain very applied.

-Tom Howard (SWRCB) agreed with the three overarching areas in need of improvement. He feels that collecting a lot of data and not having it available is a failure. In terns of the futures document, Tom feels that it needs to address the current role of the IEP. Has the focus of the IEP changed from its historical focus of water project effects on listed species? If so, what are the questions or issues that the IEP is dealing with? Tom would like to see some high level of direction from the Directors on what the focus of the IEP is, relative to other large programs? For example, is the purpose of the IEP to conduct effectiveness monitoring of BDCP? How do we relate with the California Water Quality Monitoring Council or RMP? Tom suggests that if you want to know the future direction of the IEP, you need to know what the questions are...because where the function of the IEP lies, is dependent on what questions are being answered.

-Howard Brown (NOAA) commented on the need to focus on project activities (in the nearterm, at least), adaptive management considerations associated with the Biological Opinions, and keep an eye on the documents coming out of the joint agency task forces. Additionally, Howard mentioned that improving above-dam habitat is something that NMFS views as important.

-Scott Clark (USACE) likes the ecosystem-wide focus but recognizes that his agency is very project-driven when it comes to funding. Scott is in favor of more modeling and synthesis activities.

-Dave Gore (USBR) feels that an ecosystem-approach is better than focusing on projects. He is concerned about the variability of the quality of data. Since quality and accessibility of data is important, the IEP may want to consider establishing some standards for data collection and management. Dave is in favor of seeing the total picture (what everyone is doing) in order to determine how the IEP should adapt. He reports that Reclamation is getting more pressure to conduct effectiveness monitoring, there is an increasing demand on their program to address other stressors and obtain a broader picture of the system, and there is an increasing need for a more science-based adaptive management program.

-Eric Reichard (USGS) wanted to reiterate that consistent quality of data is at the heart of any good science program. Data should be made available publicly in a consistent, easy fashion. How do we identify which audiences we are not communicating with effectively? Eric would like to see modeling brought more to the forefront and integrated better since it is important to decision making frameworks and identifying data gaps.

-Karen Schwinn (USEPA) asked how the IEP can bring added value to a number of efforts such as RMP, BDCP and San Joaquin River restoration. She does not want to see IEP reinventing wheels and she thinks the Monitoring Council is a good way to prevent that. Karen believes that the IEP doesn't have to do everything but could coordinate a large part (e.g. RMP). Perhaps, part of the future of the IEP involves brining in the Executive Officer from the Central Valley Regional Water Quality Control Board, since they play a different role than State Board. -Tom Howard (SWRCB) feels that fundamentally, the regional boards would best weigh in at the Coordinator level.

-Terry Macaulay (DSP) reiterated that the synthesis of the monitoring that IEP carries out will be important to determine if the performance measures in the Delta Plan are being accomplished.

-John McCamman (DFG) stated that there is seeming consensus on the needed improvements in the overarching science activities. He also heard interest in the IEP expanding it geographic scope, integrating with BDCP, and coordinating with RMP.

**Action (1)**: The **Coordinators** will return to the September 16, 2010 meeting having put more thought into data management, modeling and analysis, BDCP, expansion of geographic scope and expansion of our coordination role in the system.

**Action (2):** The **Coordinators** will meet with the Monitoring Council and come back to the Directors with a firm recommendation on whether the IEP should be working towards using the MyWater portals being created by the Council.

- 5. Update on the temporary delta smelt refugium in Bryon and the USFWS Native Species Conservation Hatchery (Bob Clark, USFWS)
- -Bob reported that the USFWS is okay with assuming responsibility of the fish culture facility at Byron since it fits in line with the missions of other existing USFWS captive breeding programs. The USFWS is most interested in the genetic refuge, research associated with the culture of longfin smelt, and production of smelt for research purposes. There are a number of concerns that need to be addressed prior to any transfer. These include:
  - Needed improvements to the facility,
  - Long-term funding source(s),
  - The role of UCD (partnership, MOU, other?).
- -Ren shared his view from a USFWS perspective: A larger research facility is needed. Bryon should be used as a back-up and the focus should be on the "end-game," a Native Species Conservation Hatchery.
- 6. Rio Vista Estuarine Research Station (RVERS) update (Ted Sommer, DWR)
- -Ted reported that currently the IEP is amorphous, with scientist scattered all across the Delta. The Rio Vista facility would co-locate approximately 150 IEP field staff. Most recently, an MOU has been signed with the city of Rio Vista, and Ted helped the city write a grant for an interpretive center that would help translate scientific findings to the public. The State Water Contractors have agreed (in concept) to the RVERS, which means funding is likely from the State side. Detailed site planning/moving forward can't happen until we have funding commitments from the Federal side (i.e. USBR needs to indicate that they will rent back the facility once it's built). The facility was approved by General Services because it is estimated that the capital outlay would be recouped in 20 25 years.